### **OBJECTIVE**

To assess the yield response of two foliar sprays of Fertileader Elite at bloom and 10 days later on crop of upland cotton.

### **Site Location:**

Saint Joseph, LA

#### Researcher:

H. Randall Smith, Ph.D. Mississippi State University

### STUDY INFORMATION

Variety
Population
Planting Date

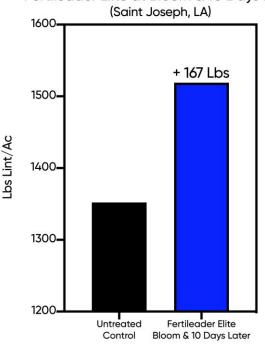
Harvest Date

Phytogen 333 WRF 52,000 June 1, 2016 November 12, 2016

### **TIMAC AGRO PRODUCT**



Cotton Yield Response from Fertileader Elite at Bloom & 10 Days Later (Saint Joseph, LA)



# **KEY FINDINGS**

+167 lbs lint/ac

More than untreated control

ROI: \$80.14/ac

**Graph:** Foliar sprays of Fertileader Elite improved yield 167 lbs lint/ac for cotton crop. The Gross Revenue above was calculated at \$0.60/lb cotton lint with Fertileader Elite retail cost of \$53.50/gallon.

## **APPLICATION**

Treatment	Application Rate	
Control	N/A	
Fertileader Elite	1.5 pint/A (2X)	



Trial ID: RT-16-DL-COT-FLEL

### **MATERIALS AND METHODS**

The study was conducted at Northeast Research Station of Louisiana State University in Saint Joseph, Louisiana on a high CEC (26) soil type possessing very high clay level . Soil tests were conducted prior to planting and analysis processed at the Waypoint Laboratories in Memphis Tennessee. 'Phytogen 333 WRF' was planted on June 1, 2016 into a trial consisting of bio-nutritional treatment in a Randomized Block Design consisting of four replications to determine effects on cotton growth and development and yield. Individual plot length consisted of four-row plots of 30' with 10' alleys. Row spacing consisted of a solid planting pattern planted on 40" centers with a seeding rate of 4 seed per row foot and planted to a depth of 0.50". Border effects were reduced utilizing border rows with additional cotton and using a solid planting pattern where evaluations were only conducted on plants in the middle two rows. All fertilizer applications were based on soil test recommendations and Mississippi State University guidelines and were consistent among treatment and untreated control. IPM measures including weed control and pest pressures were managed the same for both treatment and control plots. Fertileader Elite was applied at a rate of 1.5 pint/ac at bloom and 10 days later. Defoliation was conducted based on visual assessments of 60% open boll with harvest aids applied using high clearance ground equipment. Harvest was conducted November 12 on the two middle rows using a small plot machine harvester equipped with a weighing system to measure seed cotton of individual plots during harvest. Seed cotton weights were converted to lint pounds per acre using historical lint percentages established via University Official Variety Trials at Mississippi State University.

# **RESULTS AND CONCLUSIONS**

Foliar sprays of Fertileader Elite (1.5 pint/A) at bloom and 10 days later improved upland cotton yield over untreated control by 167 lbs lint/acre. This resulted in a ROI of \$80.14/acre.

#### **RETURN ON INVESTMENT**

Treatment	Yield Lbs lint/ac	Gross Revenue @ \$0.60/lb	Change from Control	Added Costs/ac	ROI
Control	1352	\$811.20	-	\$0.00	-
Fertileader Elite (1.5 pt/A @ Bloom & 10 Days Later)	1519	\$911.40	\$100.20	\$20.06	\$80.14

#### **Author:**

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